

# Build a Reliable Infrastructure for Patient Care

Matt Donahue  
Chief Technology Officer  
Park Place International

Michael Martz  
Chief Information Officer  
Meadville Medical Center

# About Michael Martz

- CIO at Meadville for nearly 3 years
- Previous experience with a MAGIC to 6.0 conversion
- 5 years total healthcare experience
- 30 years IT experience



PEOPLE YOU KNOW. CARE YOU TRUST. ALWAYS.

# Meadville Medical Center

- Community hospital
- @ 236 beds, 1600 employees
- 220,000+ patient visits per year
- FIRST site to Go Live with MEDITECH 6.15 and AMB Suite
- Hosting Titusville Hospital



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# Today's Goal:

To provide insight into how a reliable and resilient  
MEDITECH infrastructure can be deployed

# Real World Disaster Example:

..the day a single battery took us  
down

# Driving Factors in Developing Design Requirements

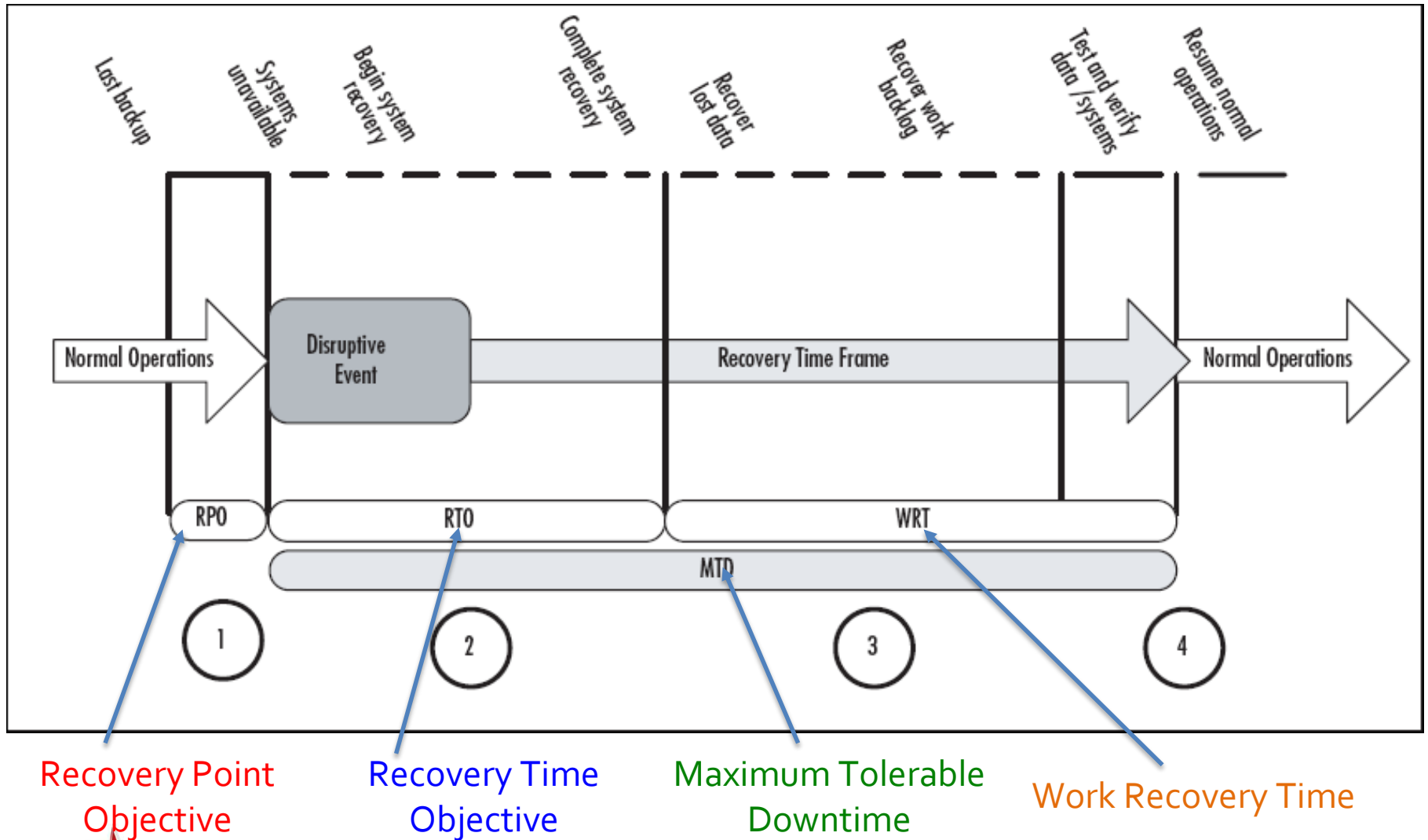
- Be able to restore in case of corruption
- Make MEDITECH as resilient as the rest of our systems
  - Direct write to disk (no server cache)
  - Storage fully in sync across both data centers
  - Ability to fail over to second site...
    1. Quickly (seconds or minutes, not hours)
    2. Easily (automatic or "easy button")
    3. With **no loss of data** (at the servers)



# Design Considerations

- RTO / RPO / MTD / WRT
- Costs
- Network Design & Resiliency
- Replication/Backup Methods
- Client Access Methods
- Testing Methods / Frequency

# Disaster Recovery Timeline

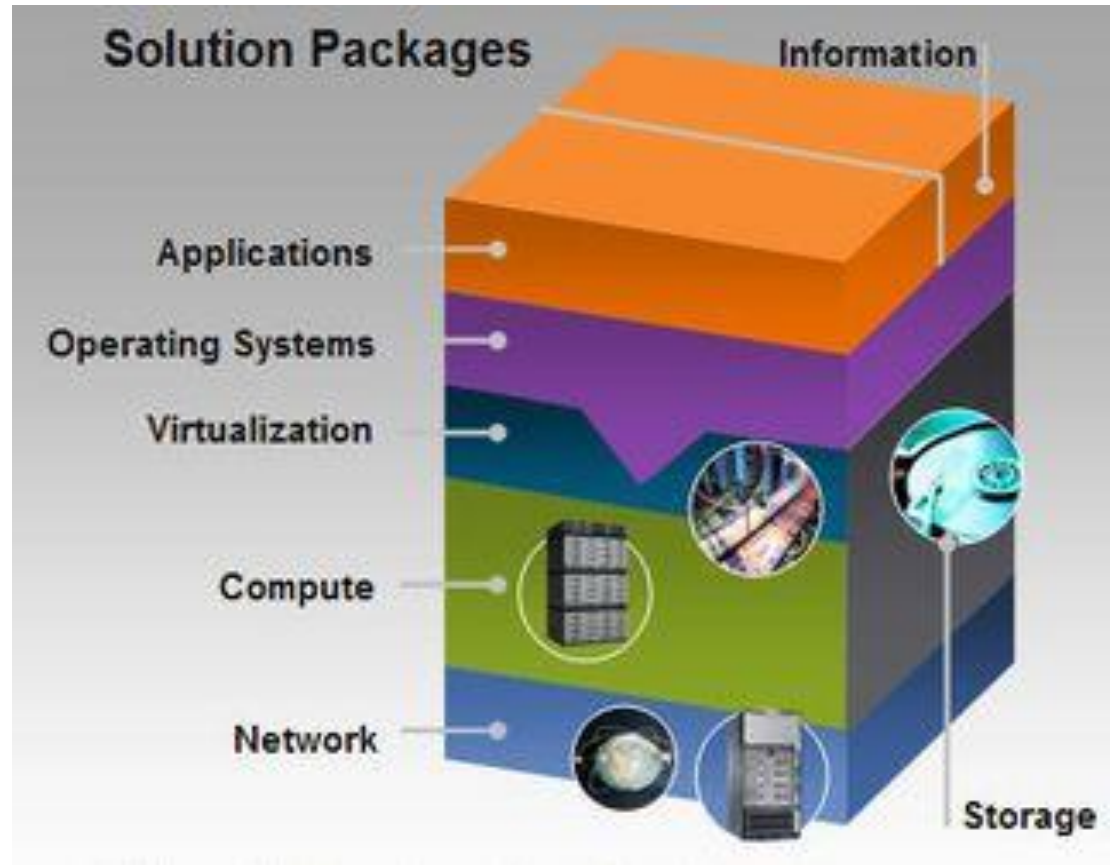




# What Makes Up Your MEDITECH Environment?

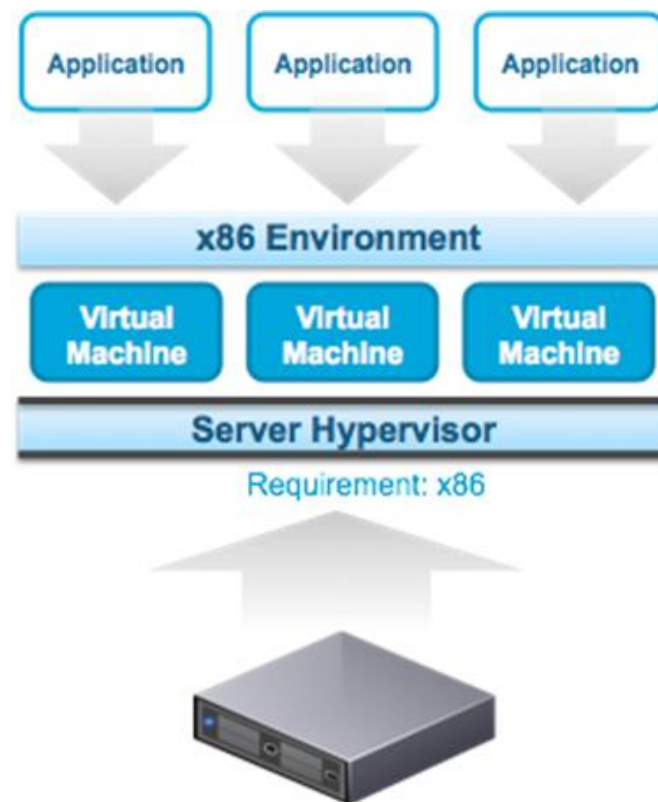
2 Key Elements:

- Applications
- Information



# Server Virtualization

- Abstract the physical hardware resources from a server and provide them as a pool of resource
- Provides resiliency from a server hardware failure, DOES NOT eliminate outages

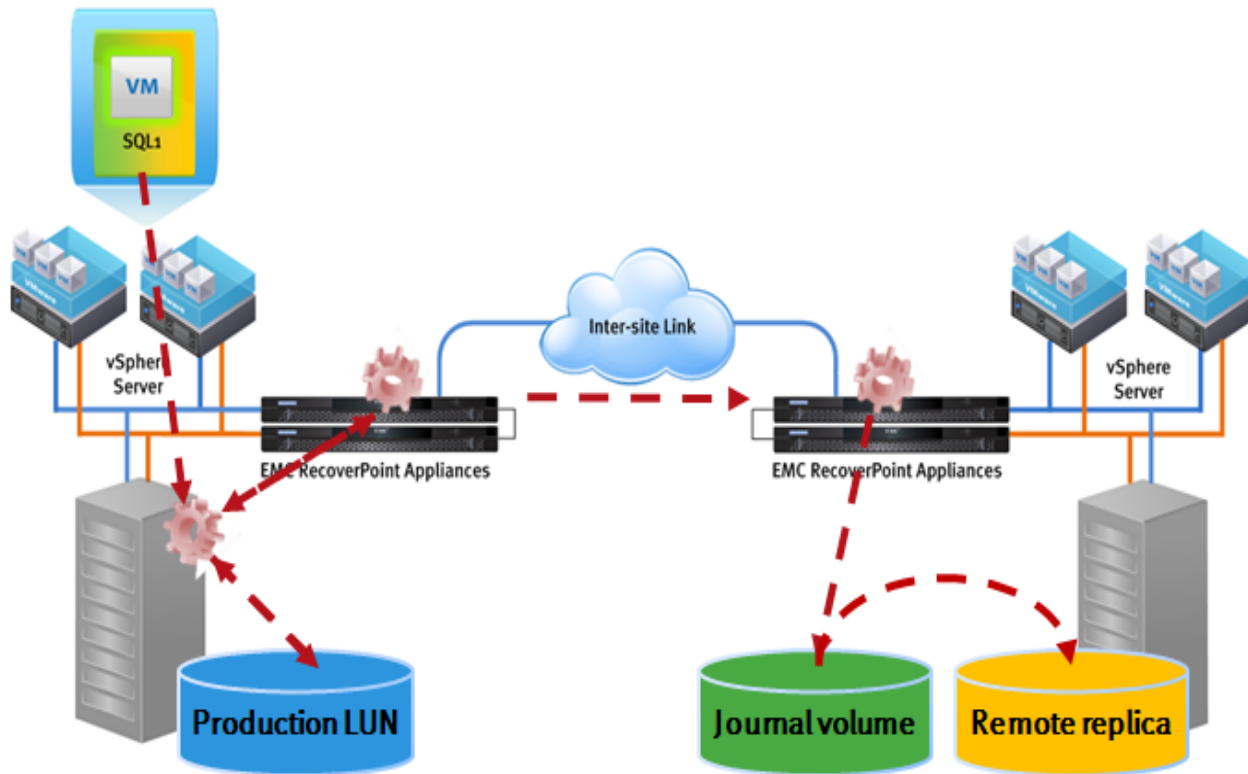


**General Purpose Server Hardware**  
(Dell, HP, IBM, OpenCompute, Quanta)

# Existing Recovery Methods

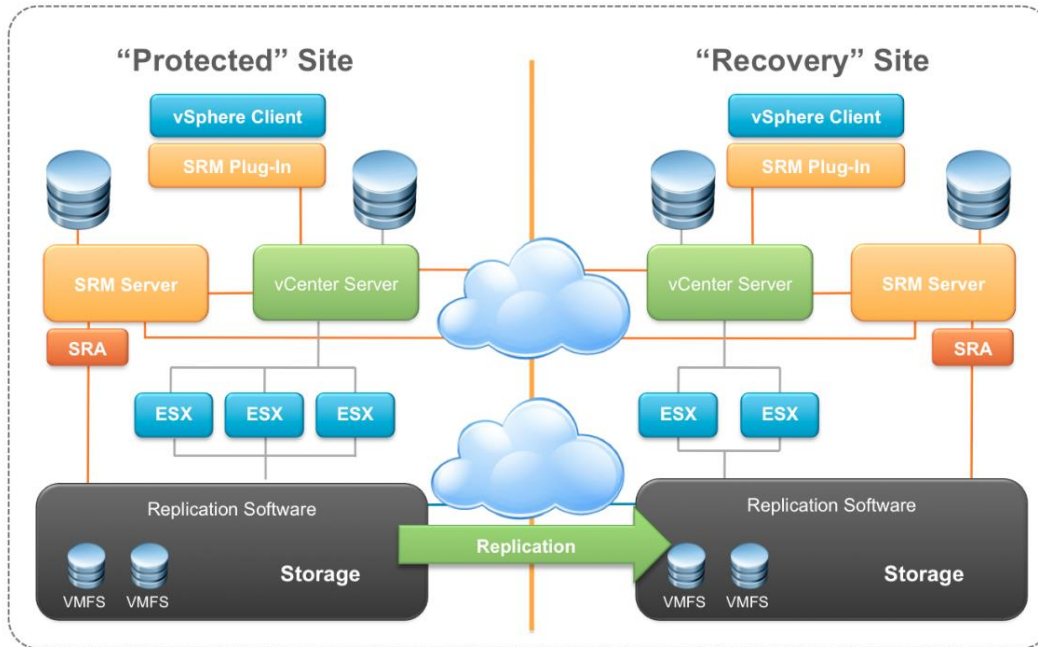
- Tape Restore
- Out-of-Frame IDR
- Mirroring
- Continuous Data Protection

# Advanced Recovery and Replication



- Continuous point-in-time journaling and replication
- Provides either sync or async replication options
- Flexible connectivity options (IP- or FC-Based)

# Site Recovery Manager



- Account for more than just your data
- Orchestration layer on top of your existing technologies
- Storage Replication Adapter (SRA) for MEDITECH-certified Storage Arrays\*

# What Does this all Mean?

# Mike's Wish List

- Storage Virtualization Support
- OS Level Clustering Support
- Spread production loads across both data centers - full "active/active" with load balancing
- Be able to lose part or all of one data center with no or minimal disruption - perhaps run slower but not stop.

Thank You!  
Open Discussion



# Other MUSE Sessions by PPI

## **1094 - Virtual Desktop Infrastructure – Lessons Learned for a Successful Deployment**

Presenters: Matt Donahue, Leo Maguire, Samuel Mata, and Annette Ballard

Organization: Park Place International; Murray-Calloway County Hospital, Murray, Kentucky

Scheduled: Wednesday May 28 at 11:00 am

## **1093 - Cloud-Based Disaster Recovery – Improving Cost and Performance**

Presenters: Mark Middleton and Audrey Parks

Organization: Park Place International; Salinas Valley Memorial Healthcare System, Salinas, California

Scheduled: Wednesday May 28 at 3:30 pm

## **1100 - MEDITECH Technical Systems Update 2014**

Presenters: Jim Fitzgerald, Joseph Kelly, Mark Middleton, Rob Bruno, Leo Maguire, and Samuel Mata

Organization: Park Place International

Scheduled: Thursday May 29 at 8:30 am

## **1099 - Revisiting Network and Security Architecture in the Virtual Era**

Presenters: Jim Fitzgerald and Jay Bazzinotti

Organization: Park Place International

Scheduled: Thursday May 29 at 2:30 pm

# Additional Resources

- PPI's Blog "Sustaining Healthcare IT"
  - <http://parkplaceintl.com/blog/>
- MEDITECH Connect
  - <http://meditechconnect.com/group/park-place-international>
- Contact us
  -  [matthew.donahue@parkplaceintl.com](mailto:matthew.donahue@parkplaceintl.com)
  -  [mmartz@mmchs.org](mailto:mmartz@mmchs.org)